

REMARKS

Claims 1-23 are pending in the present application. Applicant respectfully requests reconsideration of the present claims in view of the following remarks.

I. Formal Matters:

Election of Species Requirement and Improper Restriction Requirement:

Applicant notes that the July 13, 2010 election of species requirement is final. However, Applicant maintains the position that that Examiner Pryor has improperly withdrawn from consideration (1) dependent claim 16 directed to the herbicidal composition of independent claim 1 comprising a safener, and (2) dependent claims 17-23 directed to a method of controlling undesired plant growth using the herbicidal composition of independent claim 1.

II. Prior Art Rejections:

Rejection of Previously Presented Claims 1-7 and 17-19 Under 35 U.S.C. §103(a) In View Of U.S. Patent No. 3,997,322 (Ratledge) In Combination With Applicant's Disclosure

Previously presented claims 1-7 and 17-19 stand rejected under 35 U.S.C. §103(a) as being unpatentable in view of U.S. Patent No. 3,997,322 issued to Ratledge (hereinafter, "Ratledge") in combination with Applicant's disclosure. This rejection is respectfully traversed.

As discussed in Applicants' March 03, 2011 Amendment and Response, the teaching of Ratledge fails to disclose, teach or suggest (1) compositions comprising a petroleum hydrocarbon oil having a C13 to C55 carbon number and (2) compositions comprising metolachlor. The May 12, 2011 non-final Office Action acknowledges that the teaching of Ratledge fails to disclose these claim features of Applicant's composition; however, the May 12, 2011 non-final Office Action still concludes that the teaching of Ratledge in combination with Applicants' original specification, makes obvious Applicant's claimed invention as embodied in claims 1-7 and 17-19. Specifically, the May 12, 2011 non-final Office Action states the following from page 2, line 22 to page 3, line 3:

Ratledge does not specify the instant C13 to C55 carbon number for the instant paraffinic oil and the elected metolachlor herbicide. It would have been obvious

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to employ the instant C13 to C55 distributed paraffinic oil since Ratledge mentions no specific carbon distribution for the paraffinic hydrocarbon. Also note, Ratledge teaches that petroleum hydrocarbon (paraffinic oil) spray oils enhance the effectiveness of certain herbicides (column 2 lines 14-36). The term "certain herbicides" makes it obvious to the possibility of trying herbicides other than triazines specifically recited in Ratledge. In the absence of unexpected results for the C13 to C55 distributed paraffinic oil and metolachlor, In addition, the instant disclosure make obvious the use of the instant paraffinic oil and metolachlor. Since Ratledge is silent to the carbon distribution of the paraffinic oil, it would have been obvious to employ the instant paraffinic oil at the time of Ratledge's invention.

Applicant disagrees.

First, Applicant respectfully submits that the use of Applicant's original specification, in the proposed combination of the teaching of Ratledge and Applicant's original specification, to reject Applicant's claims is improper. The Examiner has relied on Applicant's own claims 5 and 6 in an argument to establish equivalence through Applicant's claims. Applicant respectfully submits that such use of the Applicant's specification is improper for two reasons. First, Applicant's own specification does not qualify as prior art for inclusion in a rejection under 35 U.S.C. §103(a), and second, in order to rely on equivalence as a rationale supporting an obviousness rejection, the equivalency must be recognized in the prior art, and cannot be based on Applicant's disclosure or the mere fact that the components at issue are functional or mechanical equivalents. Such is clearly stated in MPEP §2144.06 (II):

In order to rely on equivalence as a rationale supporting an obviousness rejection, the equivalency must be recognized in the prior art, and cannot be based on applicant's disclosure or the mere fact that the components at issue are functional or mechanical equivalents. *In re Ruff*, 256 F.2d 590, 118 USPQ 340 (CCPA 1958) (The mere fact that components are claimed as members of a Markush group cannot be relied upon to establish the equivalency of these components. However, an applicant's expressed recognition of an art-recognized or obvious equivalent may be used to refute an argument that such equivalency does not exist.); ** *Smith v. Hayashi*, 209 USPQ 754 (Bd. of Pat. Inter. 1980) (The mere fact that phthalocyanine and selenium function as equivalent photoconductors in the claimed environment was not sufficient to establish that one would have been obvious over the other. However, there was evidence that both phthalocyanine and selenium were known photoconductors in the art of electrophotography. "This, in our view, presents strong evidence of

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obviousness in substituting one for the other in an electrophotographic environment as a photoconductor." 209 USPQ at 759.).

An express suggestion to substitute one equivalent component or process for another is not necessary to render such substitution obvious. *In re Fout*, 675 F.2d 297, 213 USPQ 532 (CCPA 1982).

For at least the reasons provided above, Applicant respectfully submits that the proposed combination of the teaching of Ratledge with portions of Applicant's original specification to reject Applicant's claims 1-7 and 17-19 under 35 U.S.C. §103(a) is improper.

In addition, as discussed in Applicants' March 03, 2011 Amendment and Response, the teaching of Ratledge, in view of the general state of the art, would not have motivated one skilled in the art to formulate a herbicidal composition comprising a mixture of (1) at least one soil-applied herbicide comprising metolachlor, and (2) a synergistically effective amount of a lipophilic additive comprising at least one hydrocarbon fluid consisting of a paraffin oil derived from a refined fraction of petroleum oil with a distillation range at 10 mm Hg of about 190 °C to 280 °C and with a carbon number distribution from about C13 to about C55 as recited in independent claim 1.

The teaching of Ratledge does not disclose, teach or suggest to one skilled in the art to formulate a herbicide composition comprising metolachlor. The May 12, 2011 non-final Office Action argues that one skilled in the art, given the teaching of Ratledge, would have used metolachlor in the spray herbicide composition of Ratledge because Ratledge uses the phrase "certain herbicides" to describe suitable herbicides. Applicant respectfully submits that, at best, the term "certain herbicides" as used in the teaching of Ratledge refers to herbicides specifically disclosed in Ratledge, not any and all known herbicides, and especially not metolachlor, as recited in Applicant's claims 1-7 and 17-19.

Further, the teaching of Ratledge does not disclose, teach or suggest to one skilled in the art to formulate a herbicide composition comprising a hydrocarbon fluid consisting of a paraffin oil derived from a refined fraction of petroleum oil with a distillation range at 10 mm Hg of about 190 °C to 280 °C and with a carbon number distribution from about C13 to about C55. To support his obviousness rejection, as shown in the noted passage above, Examiner Pryor states that

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It would have been obvious to employ the instant C13 to C55 distributed paraffinic oil since Ratledge mentions no specific carbon distribution for the paraffinic hydrocarbon.

Applicant disagrees.

Applicant respectfully submits that silence relating to a given property of Ratledge's disclosed petroleum oil distillation fraction (e.g., the carbon number distribution of Ratledge's disclosed petroleum oil distillation fraction) does not support the obviousness of Applicant's specifically claimed property (e.g., the carbon number distribution of Applicant's recited paraffin oil).

On page 3, lines 16-18 of the May 12, 2011 non-final office action, Examiner Pryor continues to support his obviousness position by stating the following with regard to Ratledge's disclosed petroleum hydrocarbon oil fraction:

The Examiner argues that based on pressure and temperature requirements of the petroleum oil claimed and taught by Ratledge there is overlap. Thus, the petroleum oil taught in Ratledge makes obvious the petroleum oil claimed.

As discussed in Applicant's March 03, 2011 Amendment and Response, although the distillation temperature ranges overlap with regard to (i) Applicant's recited hydrocarbon fluid (i.e., consisting of a paraffin oil derived from a refined fraction of petroleum oil with a distillation range at 10 mm Hg of about 190 °C to 280 °C and with a carbon number distribution from about C13 to about C55) and (ii) Ratledge's disclosed petroleum hydrocarbon oil fraction (i.e., having a distillation range at 10 mm Hg of 300°F (148°C) to 500°F (260°C)), the resulting fractions are not obvious variations of one another. Ratledge's disclosed petroleum hydrocarbon oil fraction (1) contains fraction components that are not present in Applicant's recited hydrocarbon fluid (i.e., fraction components having a boiling point of from 148°C to less than 190°C) and (2) does not contain fraction components that are present in Applicant's recited hydrocarbon fluid (i.e., fraction components having a boiling point of greater than 260°C up to 280°C). Further, Applicant's recited hydrocarbon fluid (1) excludes fraction components having a boiling point of from 148°C to less than 190°C that are required in Ratledge's disclosed petroleum hydrocarbon oil fraction, and (2) consists of fraction components that are not present

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in Ratledge's disclosed petroleum hydrocarbon oil fraction (i.e., fraction components having a boiling point of greater than 260°C up to 280°C). For this reason, Applicant maintains the position that Ratledge actually teaches away from Applicant's recited hydrocarbon fluid and claimed invention.

Applicant respectfully submits that the teaching of Ratledge does not provide any guidance to one skilled in the art, when formulating a spray oil composition, to (1) contemplate the use of metolachlor instead of the specifically disclosed triazine herbicides of Ratledge, (2) contemplate the use of a hydrocarbon fluid consisting of a paraffin oil derived from a refined fraction of petroleum oil with a distillation range at 10 mm Hg of about 190 °C to 280 °C and with a carbon number distribution from about C13 to about C55 select instead of the petroleum hydrocarbon oil fraction having a distillation range at 10 mm Hg of 300°F (148°C) to 500°F (260°C) of Ratledge, and (3) subsequently combine metolachlor with a hydrocarbon fluid consisting of a paraffin oil derived from a refined fraction of petroleum oil with a distillation range at 10 mm Hg of about 190 °C to 280 °C and with a carbon number distribution from about C13 to about C55 to form a spray herbicidal composition. The only motivation to focus on the specific combination of metolachlor with a hydrocarbon fluid consisting of a paraffin oil derived from a refined fraction of petroleum oil with a distillation range at 10 mm Hg of about 190 °C to 280 °C and with a carbon number distribution from about C13 to about C55, and not the specifically disclosed composition components of Ratledge or thousands of other possible composition components in the art, has been gleaned from Applicant's own specification, not from the art of record.

For at least the reasons given above, Applicant respectfully submits that a *prima facie* case of obviousness has not been made with regard to the rejection of independent claim 1 in view of the proposed combination of the teaching of Ratledge and Applicant's original specification. Since claims 2-7 and 17-19 depend from independent claim 1 and recite additional claim features, a *prima facie* case of obviousness has not been made with regard to the rejection of claims 2-7 and 17-19 in view of the proposed combination of the teaching of Ratledge and Applicant's original specification. Accordingly, withdrawal of this rejection is respectfully requested.

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Rejection of Previously Presented Claims 1, 3-7 and 17-19 Under 35 U.S.C. §103(a) In View Of U.S. Patent No. 3,551,131 (Musselman) In Combination With Applicant's Disclosure

Previously presented claims 1, 3-7 and 17-19 stand rejected under 35 U.S.C. §103(a) as being unpatentable in view of U.S. Patent No. 3,551,131 issued to Musselman et al. (hereinafter, “Musselman”) in combination with Applicant’s disclosure. This rejection is respectfully traversed.

For reasons similar to those presented above, Applicant respectfully submits that the use of Applicant’s original specification, in the proposed combination of the teaching of Musselman and Applicant’s original specification, to reject Applicant’s claims is improper. Consequently, Applicant respectfully submits that the proposed combination of the teaching of Musselman with portions of Applicant’s original specification to reject Applicant’s claims 1, 3-7 and 17-19 under 35 U.S.C. §103(a) is improper.

In addition, like the teaching of Ratledge, the teaching of Musselman fails to disclose, teach or suggest (1) compositions comprising metolachlor, (2) compositions comprising a lipophilic additive comprising at least one hydrocarbon fluid consisting of a paraffin oil derived from a refined fraction of petroleum oil with a distillation range at 10 mm Hg of about 190 °C to 280 °C and with a carbon number distribution from about C13 to about C55, and (3) compositions comprising (i) metolachlor in combination with (ii) a lipophilic additive comprising at least one hydrocarbon fluid consisting of a paraffin oil derived from a refined fraction of petroleum oil with a distillation range at 10 mm Hg of about 190 °C to 280 °C and with a carbon number distribution from about C13 to about C55 as recited in independent claim 1.

Even with the above-noted deficiencies in the teaching of Musselman, which are also acknowledged in the May 12, 2011 non-final Office Action, the May 12, 2011 non-final Office Action states the following on page 4, lines 3-13:

Musselman et al. does not exemplify an invention comprising instant herbicides and instant C13 to C55 distributed paraffin or wherein the herbicide is metolachlor. It would have been obvious to make an invention comprising a C13 to C18 paraffin. One would have been[n] motivated to do this since

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Musselman et al. suggest the combination. Also note, Musselman et al. teaches that a variety of herbicides is suitable the instant invention (column 2 lines 31-34). The term “and the like” in reference to useful herbicides makes it obvious to try herbicides other than the triazines specifically recited in Musselman et al. In addition, the instant disclosure suggest[s] that triazines and acetamide (metolachlor) herbicides are equivalent (see instant claims 5 and 6). Thus, Ratledge [Musselman] and instant disclosure make obvious the use of the instant paraffinic oil and metolachlor.

For reasons similar to those given above with regard to the rejection of claims 1-7 and 17-19 in view of Ratledge, Applicant disagrees.

Applicant respectfully submits that the term “and the like” as used in the teaching of Musselman does not suggest to one skilled in the art the specific herbicide metolachlor as recited in Applicant’s claims 1-7 and 17-19. In addition, Musselman’s disclosure of (i) paraffins and/or cycloparaffins having up to eighteen carbon atoms (see, column 1, line 53 to column 2, line 8) and (ii) a hydrocracker recycle oil having a boiling point of from 500 °F to 600°F (see, column 2, lines 63 to 70, and Table III of the Examples) does not suggest to one skilled in the art Applicant’s specific and recited hydrocarbon fluid consisting of a paraffin oil derived from a refined fraction of petroleum oil with a distillation range at 10 mm Hg of about 190 °C to 280 °C and with a carbon number distribution from about C13 to about C55.

Regarding Musselman’s disclosure of paraffins and/or cycloparaffins having up to eighteen carbon atoms, the May 12, 2011 non-final Office Action states the following on page 4, lines 15-19:

Applicants argue that the instant claims disclose petroleum oil with a distillation at 10 mm Hg of about 190 degree C to 280 degree C. The Examiner argues that Musselman et al. teach a non-phytotoxic oil such as paraffins having up to C18 (column 1). Thus, Musselman’s C13-C18 paraffinic oil would meet the pressure and temperature requirement of the instant claims.

It is difficult for Applicant to understand how Musselman’s disclosure of paraffins having up to eighteen carbon atoms suggests to one skilled in the art Applicant’s specific and recited hydrocarbon fluid consisting of a paraffin oil derived from a refined fraction of petroleum oil with a distillation range at 10 mm Hg of about 190 °C to 280 °C and with a carbon number

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distribution from about C13 to about C55. Applicant respectfully submits that there simply is no connection between "paraffins having up to eighteen carbon atoms" and Applicant's specifically recited hydrocarbon fluid of claim 1.

As discussed in Applicant's March 03, 2011 Amendment and Response, Applicant respectfully submits that the teaching of Musselman, in view of the general state of the art, would not have motivated one skilled in the art to formulate a herbicidal composition comprising a mixture of (1) metolachlor, and (2) a synergistically effective amount of a lipophilic additive comprising at least one hydrocarbon fluid consisting of a paraffin oil derived from a refined fraction of petroleum oil with a distillation range at 10 mm Hg of about 190 °C to 280 °C and with a carbon number distribution from about C13 to about C55 as recited in independent claim 1.

Applicant respectfully submits that the teaching of Musselman actually teaches away from herbicide compositions containing Applicant's recited hydrocarbon fluid consisting of a paraffin oil derived from a refined fraction of petroleum oil with a distillation range at 10 mm Hg of about 190 °C to 280 °C and with a carbon number distribution from about C13 to about C55 given that Musselman specifically instruct one skilled in the art to utilize (i) paraffins and/or cycloparaffins having up to eighteen carbon atoms (see, column 1, line 53 to column 2, line 8) or (ii) a hydrocracker recycle oil having a boiling point of from 500 °F to 600°F (see, column 2, lines 63 to 70, and Table III of the Examples), not Applicant's recited hydrocarbon fluid consisting of a paraffin oil derived from a refined fraction of petroleum oil with a distillation range at 10 mm Hg of about 190 °C to 280 °C and with a carbon number distribution from about C13 to about C55. There simply is no suggestion of Applicant's claimed invention in the teaching of Musselman, alone or in view of the state of the art. The only suggestion of such a composition is found in Applicant's original specification, not from the art of record.

For at least the reasons given above, Applicant respectfully submits that a *prima facie* case of obviousness has not been made with regard to the rejection of independent claim 1 in view of the proposed combination of the teaching of Musselman and Applicant's original specification. Since claims 3-7 and 17-19 depend from independent claim 1 and recite additional claim features, a *prima facie* case of obviousness has not been made with regard to the rejection

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of claims 3-7 and 17-19 in view of the proposed combination of the teaching of Musselman and Applicant's original specification. Accordingly, withdrawal of this rejection is respectfully requested.

III. Conclusion:

Applicant submits that claims 1-23 define patentable subject matter. Accordingly, Applicant respectfully requests allowance of these claims.

Should Examiner Pryor believe that further action is necessary to place the application in better condition for allowance, Examiner Pryor is respectfully requested to contact Applicant's representative at the telephone number listed below.

No additional fees are believed due; however, the Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, to Deposit Account No. 503025.

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W&K Matter No.: 10075.0050USWO
Syngenta Docket No.: 70344